REMARKS / ARGUMENTS

Claims 1-35 are now pending.

No claims stand allowed.

Claims 1-2, 5-9, 12-16, and 19-21 have been cancelled without prejudice or disclaimer.

Claims 3, 10, and 17 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. The text of claims 4, 11, and 18 are unchanged, but their meaning is changed because they depend from amended claims. No "new matter" has been added by the Amendment.

New claims 22-35 have been added by this Amendment and also particularly point out and distinctly claim subject matter regarded as the invention. Claims 22-23 are step-plus-function claims corresponding to method claims 3-4. Claims 24-26 are directed to methods for determining a program hierarchy. Claims 27-29 are in re Beauregard claims corresponding to method claims 24-26. Claims 30-32 are means-plus-function claims corresponding to method claims 24-26. Claims 33-35 are step-plus-function claims corresponding to method claims 24-26.

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Amdt. dated: May 4, 2004

Reply to Office Action of December 4, 2003

The First 35 U.S.C. §103 Rejection

Claims 1-6, 8-13, and 15-20 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over <u>Fitzgerald</u>¹ in view of <u>Aizikowitz et al.</u>^{2 3} This rejection is respectfully traversed.

According to M.P.E.P. §2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

¹ USP 5,408,665.

² USP 6,526,571.

³ Office Action dated December 4, 2003, ¶ 3.

Furthermore, the mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

With this Amendment, claims 1-2, 5-6, 8-9, 15-16, and 19-20 have been cancelled without prejudice or disclaimer, making the rejection moot with respect to claims 1-2, 5-6, 8-9, 15-16, and 19-20.

Claim 3

Claim 3 as amended recites:

A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising: creating a public list including all public classes and interfaces defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and storing said list.

<u>Fitzgerald and Aizikowitz et al. Do Not Teach or Suggest All Claim</u> Limitations.

When evaluating a claim for determining obviousness, all limitations of the claim must be evaluated.⁴

Neither reference, either alone or in combination, suggests or discloses creating a public list including all public classes and interfaces defined in an object-oriented library, where the public list includes a class sublist for each of the public classes, and where

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each class sublist includes all direct and indirect *public_superclasses* of a class *and* excludes private classes. Fitzgerald et al. speaks generally about the availability at compile time of symbols that are external or public with respect to an object module, but makes no distinction between public and private classes as in claim 3, or including direct and indirect public superclasses and excluding private classes. The Fitzgerald et al. reference states:

Source modules 301, 303 illustrate typical source code modules, such as would be supplied to the compiler 220 for generating modules of object code. Each module 301, 303 includes certain symbols which are "external" to the module and others which may be "public" to the module. In source 301, for instance, the routine MY.sub.-- PROC.sub.-- A is defined in that source module. As such, the routine is available for use globally (i.e., "public" visibility) within the source module 301.

Often, however, it is desirable to invoke routines which may be defined elsewhere (e.g., such as in a library file purchased from a third party vendor). As shown for the MY.sub.-- PROC.sub.-- A routine, for instance, a DRAWRECTANGLE routine is called. However, the DRAWRECTANGLE routine is defined elsewhere (i.e., the actual steps for the routine are set forth in a different module). Thus, the symbol "DRAWRECTANGLE" is "external" to the source module 301.⁵

Likewise, <u>Aizikowitz et al.</u> speaks generally about identifying calls in a Java package whose targets are guaranteed to belong to the package, but makes no distinction between public and private classes as in claim 3, or including direct and indirect public superclasses and excluding private classes. With this Amendment, claim 3 has been amended to make this distinction more clear. The amendment to claim 3 finds support in the Specification at p. 11 lines 18-19, p. 15 lines 4-17, p. 16 lines 15-20, and FIGS. 2C, 6A, 6B, and 6C.

⁵ Fitzgerald et al. at col. 7 lines 36-53.

⁴ In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990).

For the above reasons, the 35 U.S.C. § 103 rejection should be withdrawn.

Dependent Claim 4

Claim 4 depends from claim 3 and thus includes the limitations of claim 3. The argument set forth above is equally applicable here. The base claim being allowable, the dependent claim must also be allowable at least for the same reasons.

Claims 10-11 and 17-18

Claims 10-11 are <u>In re Beauregard</u> claims corresponding to method claims 3-5, and claims 17-18 are means-plus-function claims corresponding to claims 3 and 4. Thus claims 10-11 and claims 17-18 include limitations similar to claims 3-4. Claims 3 and 4 being allowable, claims 10-11 and 17-18 must also be allowable.

Accordingly, it is respectfully requested that the rejection of claims based on Fitzgerald in view of Aizikowitz et al. be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

The Second 35 U.S.C. §103 Rejection

Claims 7, 14 and 21 stand rejected under 35 U.S. C. 103(a) as being unpatentable over <u>Fitzgerald</u> in view of <u>Aizikowitz et al.</u> and further in view of <u>Gossian et al.</u>^{6 7}

⁶ USP 5,974,255.

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With this Amendment, claims 7, 14, and 21 have been cancelled without prejudice or disclaimer, making the rejection moot with respect to claims 7, 14, and 21.

Accordingly, it is respectfully requested that the rejection of claims based on Fitzgerald in view of Aizikowitz et al. and further in view of Gossian et al. be withdrawn.

The Third 35 U.S.C. §103 Rejection

Claims 1-4, 8-11, and 15-18 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Sweeney et al.⁸ in view of Aizikowitz et al.⁹ This rejection is respectfully traversed.

With this Amendment, claims 1-2, 8-9, and 15-16 have been cancelled without prejudice or disclaimer, making the rejection moot with respect to claims 1-2, 8-9, and 15-16.

Claim 3

Claim 3 as amended recites:

A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:

creating a public list including all public classes and interfaces defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect public superclasses of a class and excluding private classes; and storing said list.

⁷ Office Action ¶ 4.

⁸ USP 6,230,314.

Sweeney et al. and Aizikowitz et al. Do Not Teach or Suggest All Claim Limitations.

Neither reference, either alone or in combination, suggests or discloses creating a public list including all public classes and interfaces defined in an object-oriented library, where the public list includes a class sublist for each of the public classes, and where each class sublist includes all direct and indirect *public_superclasses* of a class *and* excludes private classes.

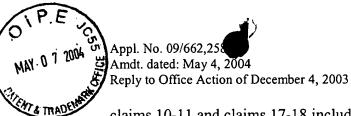
The arguments made above with respect to the <u>Aizikowitz et al.</u> apply here as well. Additionally, <u>Sweeney et al.</u> speaks generally about transforming a program using class hierarchy virtual-to-nonvirtual inheritance transformation, but makes no distinction between public and private classes as in claim 3, or including direct and indirect public superclasses and excluding private classes. With this Amendment, claim 3 has been amended to make this distinction more clear. The amendment to claim 3 finds support in the Specification at p. 11 lines 18-19, p. 15 lines 4-17, p. 16 lines 15-20, and FIGS. 2C, 6A, 6B, and 6C.

For the above reasons, the 35 U.S.C. § 103 rejection should be withdrawn.

Claims 10-11 and 17-18

Claims 10-11 are <u>In re Beauregard</u> claims corresponding to method claims 3-5, and claims 17-18 are means-plus-function claims corresponding to claims 3 and 4. Thus

⁹ Office Action ¶ 5.





claims 10-11 and claims 17-18 include limitations similar to claims 3-4. Claims 3 and 4 being allowable, claims 10-11 and 17-18 must also be allowable.

Accordingly, it is respectfully requested that the rejection of claims based on Fitzgerald in view of Aizikowitz et al. be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

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Request for Allowance

Technology Center 2100

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted, THELEN REID & PRIEST, LLP

Dated: May 4, 2004

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